



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/784,226	02/16/2001	John G. Apostolopoulos	10006736-1	2518

7590 02/26/2003

HEWLETT-PACKARD COMPANY
Intellectual Property Administration
P.O. Box 272400
Fort Collins, CO 80527-2400

EXAMINER

EMDADI, KAMRAN

ART UNIT

PAPER NUMBER

2664

DATE MAILED: 02/26/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	09/784,226	APOSTOLOPOULOS ET AL.
	Examiner	Art Unit
	Kamran Emdadi	2664

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 16 February 2001 .

2a) This action is **FINAL**. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-28 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) Claim(s) _____ is/are allowed.

6) Claim(s) 1-28 is/are rejected.

7) Claim(s) _____ is/are objected to.

8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on 16 February 2001 is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) The proposed drawing correction filed on _____ is: a) approved b) disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12) The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some * c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) The translation of the foreign language provisional application has been received.

15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) 8 .

4) Interview Summary (PTO-413) Paper No(s). ____ .
5) Notice of Informal Patent Application (PTO-152)
6) Other: _____

DETAILED ACTION

Drawings

1. This application has been filed with informal drawings which are acceptable for examination purposes only. Formal drawings will be required when the application is allowed.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 9, 16, and 20-22 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
 - Regarding claims 9 and 16, the description regarding a first and second source route does not specify which of the first or second route is the “loose” and or the “strict” route. Also the use of the term “loose” would better be enabling for examining purposes if the subset was written to be more definite as to what portion of an every node known in a route (strict) it pertains to.
 - Regarding claims 20 and 21, the “path diversity service” performed by the “path diversity unit” also includes a “description” as to what? It is unclear to the examiner what type of description is made and how?
 - Regarding claim 22, the “path diversity unit specifies the path by one of specifying” is unclear to the examiner what the “one” is referring to?

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

5. The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).
6. Claims 1-8, 11-15, 18, 19, and 23-28 are rejected under 35 U.S.C. 102(e) as being anticipated by Perkins et al. (US Patent No. 6496477).

- Regarding claims 1-3, 8, 12 and 13, Perkins teaches: a sender 103 and receiver 105 communicating data packets in a network where the packets take a plurality of paths to arrive at the destination (Col 6, lines 20-24) and (Figure 1), and a further description of the separate path selection diversity process (Col 9, lines 60-65), and two path selection process for packet flows (Col 10, lines 50-55) and further explained (Col 12, lines 25-30), where data is sent to the source regarding the path diversity scheme to be employed prior to the sending of data amongst diverse paths to a destination node (Col 13, lines 14-22).

Art Unit: 2664

- Regarding claims 4, 7, and 19 a router 1011 is used as an intermediate state routing device to assist and maintain the path diversity routing scheme employed by source and destination nodes (Col 23, lines 35-40) and (Figure 10).
- Regarding claims 5, 6, and 23-25, an application is used to determine efficient path diversity by learning intermediate nodes and using QoS considerations to establish dynamic paths between in a deterministic fashion (Col 16, lines 32-60).
- Regarding claims 11 and 18, Perkins teaches: real-time information as a data type extendible for the invention herein (Abstract) and more specifically to voice (Col 4, line 19).
- Regarding claim 14, Perkins teaches: a pair of relay agents 1021 and 1031 of diverse paths (Col 23, lines 45-50), and it is inherent to have a packet sent to a proxy device by way of an address.
- Regarding claim 15, Perkins teaches: all of the above embodiments and an IP compatibility (Col 24, lines 5-16).
- Regarding claim 26, Perkins teaches: a plurality of ISPs with redundant links working with the path diversity mechanism (Col 4, lines 63-67).
- Regarding claim 27, Perkins teaches: connection technologies of both wireless and wired (Figure 1).
- Regarding claim 28, Perkins teaches: the use of satellite, wireless, cellular and different corresponding mediums all being potential links for communication within the embodiment disclosed herein (Col 5, lines 40-51).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.
8. Claims 10 and 17 rejected under 35 U.S.C. 103(a) as being unpatentable over Perkins et al. (US Patent No. 6496477) in view of Narayanaswami et al. (US Patent No. 6477117).
 - Regarding claims 10 and 17, Perkins teaches: all of the above embodiments of a path diversity network with the goal of improving the reliability of sensitive/real-time type data flow for a plurality of different data sources including: a wireless phone, a computer a switch router, and an interface to the PSTN network all networked together (Figure 1). But fails to teach of a compatibility for wireless LAN, and more specifically the wireless protocols to include Bluetooth and 802.11. Narayanaswami teaches: a device that acts in a "PC-like" functionality to be worn on the wrist for convenience (Col 2, lines 15-16) and to interact with data exchanging network functions with devices such as: a mobile computer, a PC, and other wireless devices (Col 3, lines 30-33), and to conform to the standards of wireless LAN and wireless networking of Bluetooth and 802.11 (Cols 4-5, lines 65-3), and as is said to be a motivation for creating such a device to provide these functions at the face of a watch (Cols 1-2, lines 65-5). Therefore it would have been obvious to one of ordinary skill in the art at the time the

invention was made to have combined the use of a multi-path networking scheme used for PCs or computers both wired and wireless to a wireless PC-like device that interacts with wireless networking protocols for added functionality and maintained flexibility with emerging technology standards.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
 - Matthews (US Patent No. 5521910) Determining a best path between nodes.
 - Patrick et al. (US Patent No. 5790541) Routing in a multipoint network.
10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kamran Emdadi whose telephone number is (703) 305-4899. The examiner can normally be reached between the hours of 8am and 5pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wellington Chin, can be reached at (703) 305-4366. The fax phone numbers for the organization where this application or proceeding is assigned is (703) 872-9314 for regular communications. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Application/Control Number: 09/784,226

Art Unit: 2664

02/20/2003

Page 7

KWANG BIN YAO
PRIMARY EXAMINER

